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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,774	02/26/2002	Paul Gothard Knutson	PU020046	1807

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EXAMINER

NGUYEN, TU X

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/084,774

Applicant(s)

KNUTSON ET AL.

Examiner

Tu X. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10-12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) 4, 9, 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/26/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to amendments

Applicant's arguments filed 6/29/07 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-8, 11-12 and 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaguchi Sadao (JP 11-112376) in view of the Applicant admitted prior art.

Regarding claim 1, Yaguchi disclose an outdoor unit of a satellite television ground system comprising:

converter circuitry (see fig.1, 200)operative to receive a first satellite television signal and to block down convert the first satellite television signal;

coarse tuning circuitry (see 214, fig.1, and abstract) in communication with said converter circuitry and operative to coarse tune the first block downconverted satellite television signal; and

oscillator circuitry (see 213, fig.1) in communication with said converter circuitry and said coarse tuning circuitry, and operative to generate and provide an oscillator signal to said

converter circuitry for block downconverting the first satellite television signal, and to generate and provide the oscillator signal to said coarse tuning circuitry for coarse tuning the first downconverted satellite television signal.

Yaguchi fails to disclose a second satellite television signal and the second block downconverted television signal.

The Applicant admitted prior art discloses a second satellite television signal and the second block downconverted television signal (see Applicant specification page 3, 1st paragraph and more detail in US Patent application 20030119440, par.0013). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yaguchi with the above teaching of the Applicant admitted prior art in order to provide tracking plurality of moving satellites and receiving signals from such satellites without any disruption.

Regarding claims 2, 7, the modified Yaguchi disclose oscillator circuitry comprises a frequency locked oscillator (see Yaguchi, 214, fig.1).

Regarding claim 3, the modified Yaguchi disclose everything as claim 1 above; further Yaguchi discloses a first frequency synthesizer (see Yaguchi, par.017, PLL corresponds to synthesizer) in communication with said oscillator circuitry and operative to generate a first synthesized signal; a first signal combiner (see Yaguchi, par.017, mixer 203 corresponds to "combiner") in communication with said first frequency synthesizer and said converter circuitry, said first signal combiner operative to receive said first block downconverted signal from said converter circuitry and said first synthesized signal from said first frequency synthesizer, and to produce a first combined signal; and a filter (see Yaguchi, par.016) in communication with said

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first signal combiner and operative to receive said first combined signal and pass a first coarse tuned signal therefrom.

Regarding claim 6, Yaguchi disclose an outdoor unit for a satellite television ground system comprising:

means for receiving and block downconverting a first satellite television signal (see 200, fig.1);

means, in communication with said means for receiving and block downconverting a first satellite television signal, for coarse tuning (see 214, fig.1) said first block downconverted satellite television signal; and

means for generating and providing an oscillator signal (see 213, fig.1) to said means for block downconverting a first satellite television signal for block downconverting the first satellite television signal and for generating and providing the oscillator signal to said means for coarse tuning said first block downconverted satellite television signal for coarse tuning the first downconverted satellite television signal.

Yaguchi fails to disclose a second satellite television signal and the second block downconverted television signal.

The Applicant admitted prior art discloses a second satellite television signal and the second block downconverted television signal (see Applicant specification page 3, 1st paragraph and more detail in US Patent application 10/029645, par.0013). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yaguchi with the above teaching of the Applicant admitted prior art in

order to provide tracking plurality of moving satellites and receiving signals from such satellites without any disruption.

Regarding claim 8, the modified Yaguchi discloses means for coarse tuning said first block downconverted satellite television signal comprises: means, in communication with said means for generating and providing an oscillator signal, for generating a first frequency synthesized signal from said oscillator signal; means, in communication with said means for generating a first frequency synthesized signal and said means for block down converting a first satellite television signal, for combining said first frequency synthesized signal with said first block downconverted satellite television signal, and to produce a first combined signal therefrom; and means, in communication with said means for combining, for filtering a coarse tuned signal from said combined signal (see Yaguchi, par.004).

Regarding claim 11, Yaguchi disclose an outdoor unit of a satellite television ground system, a method of processing a satellite television signal comprising the steps of:

receiving a first satellite television signal (see abstract);
block downconverting the first satellite television signal (see 200);
coarse tuning (see 214) the first block downconverted satellite television signal;
generating an oscillator signal (see 213); and
utilizing the oscillator for block downconverting and coarse tuning the first satellite television signal (see 200).

Yaguchi fails to disclose a second satellite television signal and the second block downconverted television signal.

The Applicant admitted prior art discloses a second satellite television signal and the second block downconverted television signal (see Applicant specification page 3, 1st paragraph and more detail in US Pub.20030119440, par.0013). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yaguchi with the above teaching of the Applicant admitted prior art in order to provide tracking plurality of moving satellites and receiving signals from such satellites without any disruption.

Regarding claim 12, the modified Yaguchi disclose the step of block downconverting the first satellite television signal includes the steps of: generating a frequency multiplier signal (see par.017, mixer corresponds to multiplier); combining the frequency multiplier signal with the first satellite television signal; and filtering the combined signal to obtain the block downconverted satellite television signal; and the step of coarse tuning the first block downconverted satellite television signal includes the steps of: generating a frequency synthesizer signal; combining the frequency synthesizer signal with the block downconverted satellite television signal; and filtering the combined signal to obtain the coarse tuned satellite television signal (see Yaguchi, par.016-017).

Regarding claim 15, Yaguchi discloses receiving a master oscillator signal (see Applicant admitted prior art, US Pub.US Pub.20030119440, fig.1, element 70) from an indoor unit of the satellite ground system; and utilizing the master oscillator signal to generate the oscillator.

Allowable Subject Matter

Claims 5 and 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding dependent claim 5, the prior arts fail to teach “a second frequency synthesizer in communication with said oscillator circuitry and operative to generate a second synthesized signal; a second signal combiner in communication with said second frequency synthesizer and said converter circuitry, said second signal combiner operative to receive said second block downconverted signal from said converter circuitry and said second synthesized signal from said second frequency synthesizer, and to produce a second combined signal; and a second filter in communication with said second signal combiner and operative to receive said second combined signal and pass a second coarse tuned signal therefrom”, as cited in the claim.

Regarding dependent claim 10, the prior arts fail to teach “means, in communication with said means for generating and providing an oscillator signal, for generating a second frequency synthesized signal from said oscillator signal; means, in communication with said means for generating a second frequency synthesized signal and said means for downconverting, for combining said second synthesized signal with said second block downconverted satellite television signal, and to produce a second combined signal therefrom; and means, in communication with said means for combining, for filtering a second coarse tuned signal from said second combined signal”, as cited in the claim.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'J. My' or similar, written in a cursive style.

August 2, 2007